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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/819,291

03/28/2001

Kiyoshi Ozaki

1508.65377

6868

7590

12/28/2004

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EXAMINER

NGUYEN, HOAN C

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/819,291	<b>Applicant(s)</b> OZAKI ET AL.	
	<b>Examiner</b> HOAN C. NGUYEN	<b>Art Unit</b> 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-38 is/are pending in the application.
- 4a) Of the above claim(s) 3,4 and 7-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Species A (claims 1, 2 and 5) in Paper on October 8 2004 is acknowledged.

Applicant's arguments regarding the restriction requirement have been considered; however, the traversal was on the grounds that there is no serious burden on the Examiner in examining all of claims 1-5 together. This is not found persuasive since claim 1 cites the steps of forming first and second conductive films according to Figure 16 and claim 3 cites the steps of forming a (single) conductive film according to Figure 18. these two Repairing methods are not related.

Therefore, the requirement is deemed proper and is considered to be final.

Claims 3-4 and 7-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions and species, there being no allowable generic or linking claim. Therefore, ONLY claims 1, 2 and 5 are pending in the elected Species.

This final action is based on the amendment filed on 6/7/04.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henley (US5459410A) above in view of Yamamoto et al. (US5600460A).

In regard to claim 1, Heyley teaches (Figs. 11A-B) a fault repairing method for a liquid crystal display device, comprising the steps of:

- forming first and second disconnection
- repairing contact holes, that have a width larger than a width of a disconnected wiring (see attachment) and a depth to expose an upper surface and both side surfaces of the disconnected wiring respectively, at two locations which are positioned to sandwich a disconnected portion of the disconnected wiring; and
- forming conductive film, that are connected electrically to the upper surface and both side surfaces, on inner walls and surfaces of the first and second disconnection repairing contact holes to repair the disconnection.

Heylay fails to disclose a fault repairing method with forming first and second conductive films, that are connected electrically to the upper surface and both side surfaces of the disconnected wiring, on inner walls and surfaces of the first and second disconnection repairing contact holes to repair the disconnection. wherein

- both the first and second conductive films are formed by a laser CVD method.
- both the first and second conductive films are connected to a pixel electrode.

Yamamoto et al. teach (Fig. 28, abstract), for providing easy and reliable method of repairing, a fault repairing method with forming first and second conductive films, that are connected electrically to the upper surface and both side surfaces of the disconnected wiring, on inner walls and surfaces of the first and second disconnection repairing contact holes to repair the disconnection, wherein both the first and second conductive films are formed by a laser CVD method and both the first and second conductive films are connected to a pixel electrode.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a fault repairing method for a liquid crystal display device with limitations in claims 2 and 5 for providing easy and reliable method of repairing as taught by Yamamoto et al. teach (abstract).

### ***Response to Arguments***

Applicant's arguments filed on 6/7/04 have been fully considered but they are not persuasive.

Applicant's ONLY arguments are follows:

Henley (with or without Yamamoto) does not disclose or suggest forming contact holes for repairing disconnected wirings that are wider than the disconnected wirings.

Examiner's responses to Applicants' ONLY arguments are follows:

Henley discloses forming a contact hole being wider than the disconnected wirings (see attachment).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (571) 272-2296. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

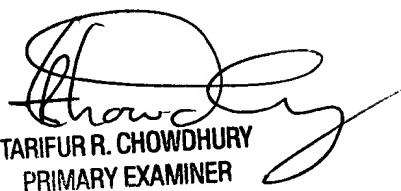
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim H Robert can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2871

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HOAN C. NGUYEN  
Examiner  
Art Unit 2871

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TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER